

What is Claimed is:

1. An apparatus for transmitting inductive energy to a battery charger assembly in proximity thereof, the battery charger assembly including a microprocessor for processing data relevant to the inductive energy, the apparatus comprising:

a memory for storing computer readable instructions relevant to providing inductive energy to a battery charger assembly;

a processor unit operatively coupled to the memory;

a transmission element operatively coupled to the processor unit so as to provide the inductive energy to the battery charger assembly; and

a housing for enclosing the memory and processor unit therein.

2. The apparatus in accordance with claim 1, in which the memory includes authentication data for authenticating the battery charger assembly for the inductive energy transmission.

3. The apparatus in accordance with claim 1, further comprising a communications device for receiving and transmitting data and the communications device being operatively coupled to the transmission element.

4. The apparatus in accordance with claim 1, further comprising an antenna and a communications device configured to receive the computer readable instructions and configured to transmit the instructions to the antenna for wireless data communications to a battery charger assembly.

5. The apparatus in accordance with claim 1, in which the processor unit is configured to receive a plurality of power parameters from the battery charger assembly.

6. The apparatus in accordance with claim 1, in which the processor unit is configured to receive a digital security certificate from a battery charger assembly.

7. The apparatus in accordance with claim 1, further comprising a plurality of transmission elements responsive to receiving a transmission from a battery charger assembly.

8. An apparatus configured for receiving inductive energy, comprising:  
a memory for storing computer readable data relevant to receiving the inductive energy;  
a processor unit for processing the computer readable data;  
a coil configured for receiving inductive energy;  
a power supply operatively coupled to the processor unit and the coil; the power supply configured to output a direct current responsive to the inductive energy; and  
a connector for operatively receiving a portion of a battery pack for logical communications with the processor unit.

9. The apparatus in accordance with claim 8, in which the processor unit is configured to provide authentication data for inductive energy reception.

10. The apparatus in accordance with claim 8, further comprising a communications device operatively coupled to the coil.

11. The apparatus in accordance with claim 10, in which the communications device is configured to receive the computer readable data and transmit the data to the coil.

12. The apparatus in accordance with claim 8, in which the processor unit is configured to receive a plurality of power parameters from the battery pack; store the power parameters in the memory; and transmit the power requirements to a power source which provides the inductive energy.

13. The apparatus in accordance with claim 8, in which the processor unit is configured to provide a digital certificate to a power source.

14. The apparatus in accordance with claim 8, in which the processor unit is configured to draw electrical power from the battery pack; and responsive to receiving an indication of inductive energy at the coil; the processor unit configured to draw electrical power via the coil.

15. The apparatus in accordance with claim 9, further comprising an antenna and a communications device configured to receive the computer readable data and configured to transmit the data to the antenna for wireless data communications to a power source.

16. A computer implemented method of providing inductive energy to a battery charger assembly, the method comprising the steps of:

at the battery charger assembly, wirelessly receiving a polling message from a source;  
transmitting a request for power to the source; and  
receiving inductive power from the source.

17. The method in accordance with claim 16, in which the step of transmitting includes a step of transmitting a plurality of power parameters to the source.

18. The method in accordance with claim 16, in which the step of transmitting includes a step of transmitting authenticating data to the source.

19. The method in accordance with claim 16, further including a step of converting the inductive power to a direct current responsive to the step of receiving.

20. The method in accordance with claim 16, further including a step of receiving power parameters from a battery pack, and storing the power parameters in a computer readable memory.

21. The method in accordance with claim 20, in which the step of transmitting includes a step of transmitting the power parameters to the source.

22. A computer apparatus, comprising:  
a processor; and  
a memory for storing computer readable instructions that, when executed by said processor, cause the computer to perform the steps of:  
receiving a polling message from a source;  
transmitting a request for power to the source; and  
providing an indication to a battery pack of receiving inductive power from the source.
23. The computer apparatus in accordance with claim 22, in which the step of transmitting includes a step of transmitting power parameters to the source.
24. The computer apparatus in accordance with claim 22, in which the step of transmitting includes a step of transmitting authenticating data to the source.
25. The computer apparatus in accordance with claim 22, in which the step of transmitting includes a step of transmitting authenticating data to the source.
26. The computer apparatus in accordance with claim 22, in further including a step of receiving computer readable power data from a battery pack.
27. The computer apparatus in accordance with claim 22, in further including a step, switching power state from battery power to inductive power, responsive to the step of providing an indication.